



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,265	07/19/2001	Anthony Vernon Walker Smith	15-979	9891
32498	7590	05/17/2006	EXAMINER	
CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC ATTN: JOHN CURTIN P.O. BOX 1995 VIENNA, VA 22183			LI, SHI K	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/909,265	SMITH ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Shi K. Li	2613

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- The period for reply expires 3 months from the mailing date of the final rejection.
- The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- They raise new issues that would require further consideration and/or search (see NOTE below);
- They raise the issue of new matter (see NOTE below);
- They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-37.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.

12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_

13.  Other: \_\_\_\_\_.

Continuation of 11. does NOT place the application in condition for allowance because: The Applicant argues that the present specification adequately describes the "with and without regeneration" feature of claim 1 and refers to page 14, lines 5-21; page 15, lines 26-28, page 17, lines 1-31, and page 21, line 2 as well as FIG. 5A. Page 14, lines 5-21 talk about protection. Nowhere does regenerator be mentioned there. Page 15, lines 16 teaches "with a regenerator ... or no regenerator". There is no single route that is with and without regenerator. Page 17, lines 1-31 teaches, in the first paragraph routes with one regenerator, two regenerators and three regenerators. In the second paragraph, it teaches that no sets with  $k=0$  or 1 are possible. That is, routes without a regenerator are not possible. The fourth paragraph teach 0-regenerator, i.e., without regenerator. Again, it does not teach "with and without regenerator". FIG. 5A shows a route 22 which has no regenerator. However, it is marked with a 'X' which means a path that is not viable. Again, no single path in FIG. 5A is "with and without regenerator".

The Applicant argues on page 13 that Kim teaches single route may be created using different vectors at another, later point in time, this is not akin to the creation of a plurality of routes at any moment in time as in the present invention. However, nowhere does the claim language include the phrase "at any moment in time".

The Applicant argues that one of ordinary skill in the art would not equate "fragment vectors" with "routes" as the Examiner appears to have done. The Examiner states in the Final Office action "Kim uses a fragment vector  $h=(h_1, h_2, \dots, h_k)$  to denote a route". Kim can be considered as one of ordinary skill in the art.

The Applicant argues that Kim does not disclose or suggest the method of claims 34 and 35. The Examiner disagrees. Kim et al. teaches a method for establishing a connection in a WDM network. Kim et al. teaches connection request in p. 26, right col., first paragraph. Kim et al. teaches in FIG. 1 a path which is equivalent to a "link path" of instant application. By placing regenerators in different nodes as taught in page 26, left col., Kim et al. teaches a plurality of routes equivalent to "viable regenerator paths" as defined by the instant specification. Kim et al. then teaches to use dynamic programming to compute cost of viable regenerator paths. Finally, Kim et al. teaches to choose the path with minimal cost for the connection (see p. 27, Section 2.1, Problem Formulation Using Dynamic Programming). Regarding claim 34, Kim et al. teaches in Section 4 evaluation of various regenerator placement algorithms on a 25-node bidirectional ring network. Kim et al. teaches maintaining status of regenerators and wavelengths (e.g., FIG. 3 shows the results of a network with 16 regenerators and 8 wavelengths). When a call request arrives, available resources are located for setup a lightpath. If resources are not available, the call is blocked. Regarding claim 35, Kim et al. teaches in Eq. (1) to evaluate BER for regenerator paths and engineer regenerator paths such that they all meet BER requirements.

*Shi K. Li*  
Shi K. Li  
Patent Examiner